

|  | Application No.                                     | Applicant(s)                |
|--|---|-----------------------------|
| Notice of Allowability   | 10/078,946  | SHAHRIER ET AL.             |
|  | Examiner  | Art Unit                    |
|  | Man Phan  | 2616                        |
|  |   |                             |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |   |                             |
| 1. This communication is responsive to the communications filed 3/24/2006.   |   |                             |
| 2. The allowed claim(s) is/are 3-8, 10, 11, 13 (Claims are renumbered as 1-9 respectively).  |   |                             |
| 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some* c) ☐ None of the:  |   |                             |
| <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>  |   |                             |
| Copies of the certified copies of the priority documents have been received in this national stage application from the  |   |                             |
| International Bureau (PCT Rule 17.2(a)).   |   |                             |
| * Certified copies not received:   |   |                             |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |   |                             |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |   |                             |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  |   |                             |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |   |                             |
| 1) hereto or 2) to Paper No./Mail Date   |   |                             |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date  |   |                             |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |   |                             |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |   |                             |
|  |   |                             |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892)  | F  Notice of Informal D                             | otant Application (DTO 450) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5. ☐ Notice of Informal Page 6. ☐ Interview Summary | atent Application (PTO-152) |
|  | Paper No./Mail Date                                 | e                           |
| <ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0<br/>Paper No./Mail Date</li> </ol>  | 8), 7. ⊠ Examiner's Amendn                          | nent/Comment                |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material   | 8. 🛭 Examiner's Stateme                             | nt of Reasons for Allowance |
| or biological Material   | 9.  |                             |
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## Reasons for allowance

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1. This communication is in response to applicant's 03/24/2006 amendment in the application of Shahrier et al. for a "Method and system for a low-overhead mobility management protocol in the Internet Protocol layer" filed 02/20/2002. The proposed amendments to the claims have been entered and made of record. Claims 1-2, 9, 12, 14 have been canceled per Applicant's request, and claims 3, 6, 10, 13, 15 have been amended. The claims have been amended to better point out and more distinctly claim subject matter comprising the invention.

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Mr. Frederick Koenig III (Reg. #29,662) on June 14, 2006.
- 3. The application has been amended as follows:

## IN THE CLAIMS:

- I. Claim 15: Cancel.
- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

- 5. Claims 3-8, 10, 11, 13 are allowable as evident by applicant's amendment (Claims are renumbered as 1-9 respectively).
- 6. The following is an examiner's statement of reasons for allowance: The instant application is deemed to be directed to a nonobvious improvement over the invention patented in closest prior arts of record. The improvement comprises wherein each router is an Access Router (AR) having a unique Internet Protocol (IP) address and a geographic access range in which the ARs communicate data to the MNs; each MN is associated with a home AR; each AR has as its Mobile Node Location List an associated Node Location Table (NLT) identifying each MN for which the AR is the home AR and the IP address of a current location of each such MN; wherein each Router is a Network Address Translation router (NAT) further comprising a plurality of networks, each having a different one of the NATs with a unique global address, at least one Host associated with the network's NAT, and at least one Mobile Node (MN), each Host having a service area in which it can communicate data to the MNs; each MN having a home Host in a home network which defines a default local address which is paired with the global address of the home network's NAT to define a default binding of the MN; the NAT of each network having as its Mobile Node Location List an associated Mobile-Home Database (MHD); wherein the home AR maintains a Node Location Table (NLT) identifying each MN for which the AR is the home AR and the IP address of a current location of each such MN, the

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current location IP address being the third IP address which equal to the second IP address if the MN is in communication with the Internet via its home AR, and the home AR creates the data portion of the second datagram by referencing the Node Location Table (NLT); wherein the MHD identifies 24 bit local and global addresses and a location field such that each MN, which has as its home Host, a Host associated with the NAT, is identified with a 24 bit local address of a current association of the MN with a Host associated with the NAT, a null global address, and a home flag in the location field, or a binding defined by a 24 bit local address of an association of the MN with a Host not associated with the NAT and a 24 bit global address of the NAT associated with that Host and an away flag in the location field; and each MN, which is currently associated with a Host associated with the NAT, but has a home Host which is not associated with the NAT, is identified with a 24 bit local address of the current Host association of the MN,

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7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

a null global address, and a home flag in the location field, as specifically recited in the claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Man U. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached Monday through Friday from 6:00 am to 3:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding

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should be directed to the Group receptionist whose telephone number is (571) 272-2600.

9. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. should you have any questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

MPhan

08/25/2006

MAN U. PHAN
PRIMARY EXAMINER